# IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

SLEEPY HOLLOW
CAMPGROUND & RV PARK

Public Water Supply Facility No. 5260601

ADMINISTRATIVE CONSENT ORDER NO. 2011-WS-03

TO: Jim and Sandy Gingerich, Owners Sleepy Hollow Campground & RV Park 3340 Blackhawk Ave. NW Oxford, IA 52322

#### I. SUMMARY

This administrative consent order (order) is entered into between the Iowa Department of Natural Resources (Department) and Jim and Sandy Gingerich, dba Sleepy Hollow Campground & RV Park (Sleepy Hollow). The parties agree to issuance of this order to resolve a failure to comply with the Department issued compliance schedule, gross alpha Maximum Contaminant Level (MCL) violations, acute coliform bacteria MCL violations, and non-acute coliform bacteria MCL violations. This order requires Sleepy Hollow to take the following actions:

- 1 Within 30 days after receiving this order, submit plans and specifications and a construction permit application to the Department's Water Supply Engineering Section regarding the installation of continuous chlorination equipment
- 2. Within 30 days after the construction application has been approved by the Department's Water Supply Engineering Section, complete construction of continuous chlorination equipment and conduct appropriate monitoring as required in a revised operation permit
- 3 Within 90 days after receiving this order, submit a preliminary engineering report, which must be prepared by an engineer registered with the state of Iowa, and must contain:
  - an evaluation of alternate water sources;
  - b an evaluation of treatment technologies to remove gross alpha from drinking water;

- c a detailed cost analysis of implementing alternate water sources and treatment technologies;
- d recommendations for complying with the gross alpha MCL; and
- e a proposed time schedule for implementation of the various alternatives offered in the report.
- 4 Within 180 days after receiving this order, complete construction of proposed actions to comply with gross alpha MCL

Any questions regarding this order should be directed to:

#### Relating to technical requirements:

Cecilia Naughton
Environmental Specialist
Iowa Department of Natural Resources
401 SW 7<sup>th</sup> Street, Suite M
Des Moines, Iowa 50309-4611
Ph: 515/725-0289

#### Relating to legal requirements:

Diana Hansen
Attorney at Law
Iowa Department of Natural Resources
502 E. 9<sup>th</sup> Street
Des Moines, Iowa 50319-0034
Ph: 515/281-6267

#### Direct payment of penalty to:

Iowa Department of Natural Resources 502 East 9<sup>th</sup> Street Des Moines, Iowa 50319-0034

#### II. JURISDICTION

This order is issued pursuant to Iowa Code section 455B 175(1), which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part 1, and the rules promulgated or permits issued pursuant thereto; and Iowa Code section 455B 109 and 567 Iowa Administrative Code (IAC) chapter 10 (455B), which authorize the Director to assess penalties

#### **III. STATEMENT OF FACTS**

1. The public water supply system serving Sleepy Hollow derives its water from one well, well no 4. There is ion exchange softening treatment provided at the Sleepy Hollow store and the pool house. This unit serves only the portion of the system where the showers and washing machine are located. No treatment is provided to the portion of the system that serves the residential population. Distribution pressure and storage is provided by four hydropneumatic tanks, two of which are located in a storage shed next to a garage in the mobile home park, one of which is in a storage room at the pool house, and the last of which is located in the storage room of the Sleepy Hollow store. The system serves the Sleepy Hollow store, shower house, 16 mobile homes, one house, and 135 RV hookups. The facility serves an estimated 75 persons, with a daily flow of 0.015 million gallons per day, and is a community public water supply system.

- 2. On April 14, 2005, just after Sleepy Hollow's ownership changed to the present owners, the Department issued this public water supply system a water supply operation permit. The operation permit required sampling for total coliform bacteria once per month and sampling for gross alpha once every six years
- 3. On July 22, 2005, Sleepy Hollow received a Notice of Violation (NOV) for failure to monitor for coliform bacteria in June 2005
- 4 On March 6, 2006, Sleepy Hollow was issued an NOV for a non-acute total coliform bacteria MCL violation for February 2006. Public notification was required for this violation.
- 5. On July 11, 2006, Ryan Stouder, an Environmental Specialist at Field Office No. 6 (FO 6), conducted a sanitary survey at Sleepy Hollow. As a result of the sanitary survey, the facility was required to disconnect water softener backwash hoses and install a proper air gap system.
- 6. On October 9, 2006, Mr. Stouder made a site visit to follow up on the sanitary survey. He observed that two cross connections that had been cited in the sanitary survey report had been eliminated.
- 7. On March 7, 2008, Sleepy Hollow was issued a revised water supply operation permit which required sampling for total coliform bacteria once per month and sampling for gross alpha once every six years. The revised permit added a requirement that di(2-ethylhexyl) phthalate be monitored quarterly
- 8 On March 11, 2009, Sleepy Hollow was issued a revised operation permit to change gross alpha sampling to once per quarter and combined radium monitoring to once every three years
- 9 On June 5, 2009, Sleepy Hollow was issued an NOV for a non-acute total coliform bacteria MCL violation for May 2009 Public notification was required for this violation.
- 10. On June 10, 2009, Mr. Stouder conducted a sanitary survey of this facility. There were no requirements from this sanitary survey.
- 11. On November 3, 2009, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the fourth quarter of 2009. The four quarter running annual average (RAA) was 21.3 pCi/L. Public notification was required for this violation.
- 12 On November 19, 2009, Sleepy Hollow was issued a revised water supply operation permit with a compliance schedule to address gross alpha MCL violations. The revised permit required the facility to submit a preliminary engineering report (PER) by

- May 19, 2010. The PER was required to contain an evaluation of alternate water sources, potential treatment technologies to remove gross alpha, a cost analysis, recommendations for complying with MCL standards, and a proposed time schedule.
- 13. On February 16, 2010, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the first quarter of 2010. The four quarter RAA was 21.3 pCi/L Public notification was required for this violation.
- 14. On May 25, 2010, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the second quarter of 2010. The four quarter RAA was 18.6 pCi/L. Public notification was required for this violation.
- 15 On August 23, 2010, Sleepy Hollow was issued an NOV for failure to collect an annual di(2-ethylhexyl)phthalate sample during the first quarter of 2010. Public notification was required for this violation.
- 16. On August 24, 2010, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the third quarter of 2010. The four quarter RAA was 17.1 pCi/L Public notification was required for this violation.
- 17 On September 7, 2010, Sleepy Hollow was issued an NOV for failure to meet the compliance schedule in the operation permit. Sleepy Hollow was required to submit a PER by no later than September 30, 2010. Public notification was required for this violation.
- 18 On September 24, 2010, Sleepy Hollow was issued an NOV for a non-acute total coliform bacteria violation for September 2010 Public notification was required for this violation.
- 19. On September 30, 2010, Mr. and Mrs. Gingerich, the owners of Sleepy Hollow, faxed a letter to the Department's Water Supply Operations Section. The letter was drafted by Mr. Larry Trout and stated that zeolite softening would lower the gross alpha levels below the MCL. He referenced sample results collected from the University of Iowa Hygienic Lab (UHL) that demonstrated this was successful in reducing radionuclide levels. This document was not acceptable as a PER, in part, because it was not written by an engineer. In addition, the requested data from the appendix was not detailed with an evaluation of different types of potential treatment or alternative water sources, a detailed cost analysis of treatment options or alternative source options, or a proposed time schedule for completion of the project
- 20 On October 12, 2010, Mr. Stouder, FO 6, and Environmental Specialist Terisa Thomas conducted a site visit with Mr. Gingerich to discuss what actions had previously been taken to comply with the gross alpha MCLs. While at the facility, Mr. Stouder received a phone call from Water Supply Operations Section staff stating that Sleepy Hollow had an acute total coliform bacteria MCL violation. Public notice was emailed to

Mr. Gingerich. Mr. Stouder collected several bacteria and gross alpha samples throughout the facility during the site visit. There were numerous issues that were apparent after this visit including the fact that there were two separate treatment units (softeners) and a large iron filtration unit that served a portion of the transient system, including the shower house, the laundromat, and swimming pool facility. The rest of the transient system and the community system, which includes the RV or mobile home portion, were completely untreated. It was decided that, while the samples collected that day could prove helpful in determining the steps that should be taken in the future, in order to comply with the MCL it would be necessary to have an engineer evaluate and design any upgrades to correct Sleepy Hollow's deficiencies.

- 21 On December 13, 2010, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the fourth quarter 2010. The four quarter RAA was 17.3 pCi/L Public notification was required for this MCL violation.
- 22. On February 16, 2011, Sleepy Hollow was issued an NOV for a non-acute gross alpha MCL violation for the first quarter 2011. The four quarter RAA was 20.3 pCi/L Public notification was required for this MCL violation.

#### IV. CONCLUSIONS OF LAW

- Iowa Code section 455B 172 makes this Department the agency of the state to conduct the public water supply program. Iowa Code section 455B 171 defines a public water supply system as a system for the provision of piped water for human consumption, if the system has at least fifteen service connections or regularly serves at least twenty-five individuals. Iowa Code sections 455B 173(3), (5), and (6) authorize the Environmental Protection Commission (Commission) to promulgate rules relating to the operation of public water supply systems and to adopt drinking water standards to assure compliance with federal standards adopted pursuant to the federal Safe Drinking Water Act. The Commission has the authority to adopt rules relating to monitoring, record keeping, and reporting requirements for any public water supply. The Commission has adopted such rules at 567 IAC chapters 40-43
- 2. Rule 567 IAC 40.2(455B), further defines public water supply by defining "community water system" as a public water supply which has at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents, consistent with federal regulations. A "noncommunity water system" is any other public water supply. This facility is classified as a community water system.
- 3. Subrule 41.2(1), paragraph "b" establishes the MCL for coliform bacteria. For a system that collects less than 40 samples per month, no more than one sample collected during a month may be total coliform-positive. In addition, any fecal coliform-positive repeat sample or E. Coli-positive repeat sample, or any total coliform-positive repeat

sample following a fecal coliform-positive or *E. Coli*-positive routine sample constitutes a violation of the MCL for total coliforms and is considered an acute risk to health

- 4 Subrule 42.4(3), paragraph "b" provides:
  - (1) Continuous disinfection
- 1. When required. Continuous disinfection must be provided at all public water supply systems, except for: groundwater supplies that have no treatment facilities or have only fluoride, sodium hydroxide or soda ash addition and that meet the bacterial standards as provided in 41 2(455B) and do not show other actual or potential hazardous contamination by microorganisms.
- 2. Method Chlorination is the preferred method Chlorination may be accomplished with liquid chlorine, calcium or sodium hypochlorites or chlorine dioxide. Other disinfecting agents will be considered, provided a residual can be maintained in the distribution system, reliable application equipment is available and testing procedures for a residual are recognized in "Standard Methods" ("Standard Methods" is defined in 40.2.)
- 3. Chlorine residual. A minimum free available chlorine residual of 0.3mg/L or a minimum total available chlorine residual of 1.5 mg/L must be continuously maintained throughout the water distribution system, with certain exceptions.
- 4. Test kit. A test kit capable of measuring free and combined chlorine residuals in increments no greater than 0.1 mg/L in the range below 0.5 mg/L, no greater than 0.2 mg/L in the range 0.5 to 1.0 mg/L, and no greater than 0.3 mg/L in the range from 1.0 mg/L to 2.0 mg/L must be provided at all chlorination facilities. The test kit must use a method of analysis that is recognized in "Standard Methods"
- 5. Subrule 42.4(3) provides that systems that provide treatment such as disinfection must perform routine operational monitoring, as follows:
  - -Daily free and total available chlorine residuals
  - -Daily record of the amount of chlorine used
  - -Daily record of the total water used
  - -Monthly record of the total water used
  - -Monthly static water levels and pumping levels
- 6. Subrule 567 IAC 41 2(1) requires a community water system serving a population between 25 and 1,000 to be sampled for coliform bacteria once per month. More frequent sampling may be required. When positive results are obtained in a routine sample, additional follow-up sampling is required. Subrule 83 1(3) requires the samples to be analyzed at a certified laboratory. Subrule 42 4(1) requires that the analytical results be reported to the Department within ten days after the test. Subrule 42 5(1)

requires a public water supply system to retain records of bacteria analyses of its water supply for a period of five years

- Subrule 567 IAC 43 2(2) requires that no person shall operate any public water supply system or part thereof without, or contrary to any condition of, an operation permit issued by the director. Subrule 43 2(5), subparagraph "a," states that operation permits may contain such conditions as are deemed necessary by the director to ensure compliance with all applicable rules of the Department, to ensure that the public water supply system is properly maintained, to ensure that potential hazards to the water consumer are eliminated promptly, and to ensure that the requirements of the Safe Drinking Water Act are met Subrule 43 2(5), subparagraph "b," states that where one or more MCLs, treatment techniques, designated health advisories, or action levels cannot be met immediately, a compliance schedule for achieving compliance with standards may be made a condition of the permit Failure to comply with the compliance schedule in the water supply operation permit issued November 19, 2009 constitutes a violation of subrule 43 2(2) and subrule 43 2(5)"b"
- 8 Subrule 41.8(1)"e" states that monitoring frequency for gross alpha will be set forth in the water supply operation permit. Subrule 83.1(3) requires the samples to be analyzed at a certified laboratory. Subrule 567 IAC 41.8(1)"b" establishes the MCL for gross alpha. The MCL for gross alpha, which includes Radium 226 and excludes radon and uranium, is 15pCi/L. Subrule 41.8(1)"c" states that for a system that samples more than once per year, compliance with the MCL is determined by a running annual average (RAA) at each sampling point. If the RAA of any sampling point is greater than the MCL, the system is immediately in violation of the MCL. If any sampling point causes the RAA to exceed the MCL, the system is immediately in violation of the MCL. Subrule 567 IAC 43.3(10)"b"(3) states that the Best Available Technology for systems serving fewer than 10,000 people is reverse osmosis.

#### V. ORDER

THEREFORE, the Department orders and Sleepy Hollow agrees to comply with the following provisions in order to abate and redress violations of Department rules and the facility's public water supply operation permit:

1. You are required to install approved continuous chlorination facilities and provide continuous chlorination of this water supply within 30 days of receipt of approval from the Department's Water Supply Engineering Section and receipt of the construction permit from that section. Prior to installation of the equipment, you are required to obtain approval of the plans, specifications and other documents relating to the continuous chlorination equipment from the Department's Water Supply Engineering Section. The documents and other information required are enclosed with this order and shall be completed and submitted to the Department's Water Supply Engineering Section within

30 days of receipt of this order. Upon receipt by the Department's Water Supply Engineering Section of the above items, the Department's Water Supply Engineering Section will approve, recommend modifications to, or disapprove the installation.

A If continuous chlorination is approved and installed as the method of continuous disinfection for this facility, you are required to monitor chlorine residuals. Chlorine residuals are required to be monitored on a daily basis using an approved test kit in accordance with the rule requirements. You are required to maintain minimum chlorine residuals of 0.3 mg/L free or 1.5 mg/L total available chlorine throughout the distribution system, except at dead ends or low use areas. Chlorine residuals are required to be monitored in the distribution system in conjunction with all total coliform monitoring. The amount of chlorine used in the system shall also be monitored on a daily basis.

B. If continuous chlorination is installed as the continuous disinfection method for this facility, you are required to complete and submit monthly operation reports (MORs) to FO 6, 1023 West Madison Street, Washington, Iowa 52353

You are required to record the following information on the MOR and submit the MOR to the field office on a monthly basis:

- -Daily free and total available chlorine residuals.
- -Daily record of the amount of chlorine used
- -Daily record of the total water used
- -Monthly record of the total water used
- -Monthly static and pumping level

A form for the MOR, also referred to as Groundwater Monthly Operation Report for 4-log, may be obtained from the Department's internet website at <a href="www.iowadnr.gov">www.iowadnr.gov</a> or from the field office by calling (319)-653-2135

- You are required to monitor this facility on a monthly basis for coliform bacteria and to maintain full compliance with the coliform bacteria monitoring requirements. This includes taking all required repeat and additional routine samples required by the Department in the event of an unsatisfactory coliform bacteria sample
- 3. Submit a preliminary engineering report to the Department's Water Supply Engineering Section within 90 days of receipt of this order. The report must be prepared by an engineer registered with the state of Iowa. The preliminary engineering report must contain:
  - An evaluation of alternate water sources.
  - An evaluation of treatment technologies to remove gross alpha from drinking water.
  - A detailed cost analysis of implementing alternate water sources and treatment technologies

- Recommendations for complying with the gross alpha MCL standard.
- A proposed time schedule for implementation of the various alternatives offered in the report.
- 4. Complete construction of proposed actions to comply with gross alpha MCL within 180 days of receipt of this order.

#### VI. PENALTY

- 1 Iowa Code section 455B 191 authorizes the assessment of civil penalties of up to \$5,000 00 per day of violation for the violations involved in this matter.
- 2 Iowa Code section 455B 109 authorizes the Environmental Protection Commission to establish by rule a schedule of civil penalties up to \$10,000 00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to this chapter, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an order without an administrative penalty.

#### VII. WAIVER OF APPEAL RIGHTS

Iowa Code section 455B 175, and 561 IAC 74(1), as adopted by reference by 567 IAC chapter 7, authorize a written notice of appeal to the Commission. This order is entered into knowingly by and with the consent of Sleepy Hollow. By signature to this order, all rights to appeal this order are waived.

#### VIII. NONCOMPLIANCE

Compliance with Section V of this Order constitutes full satisfaction of all requirements pertaining to the violations described in this order. Failure to comply with this order may result in the imposition of administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B 191

Jim Amgench	Dated this day of
JIM GYNGERICH, OWNER	<b>A</b> • •
SLEEPY HOLLOW CAMPGROUND & RV PARK	May , 2011
Sandy Lingerich SANDY GINGERICH, OWNER	D. (14) 17 1 6
CANDY CHICEDICH ANAMED	Dated this day of
SAND I UMBERICH, WWNER	M
SLEEPY HOLLOW CAMPGROUND & RV PARK	May, 2011
May & Nampe	Dated this // day of
ROGER'L LANDE, DIRECTOR	2/12
IOWA DEPARTMENT OF NATURAL RESOURCES	
Sleeny Hollow Comparound & DV Book Water Sumb	Facility No. 5200001 Carilli

Sleepy Hollow Campground & RV Park- Water Supply Facility No. 5260601, Cecilia Naughton - Water Supply Operations Section, Ryan Stouder- Field Office No. 6, Diana Hansen- Legal Services Bureau, II.B.2 c.1, II.B.2 c.5